China, Crypto-Currency, and the World Order

Part 1: Tribute and Tribulations

May 2014

By Nick Land

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Issuing countries of reserve currencies are constantly confronted with the dilemma between achieving their domestic monetary policy goals and meeting other countries' demand for reserve currencies. […] *The Triffin Dilemma, i.e., the issuing countries of reserve currencies cannot maintain the value of the reserve currencies while providing liquidity to the world, still exists.* —Zhou Xiaochuan

What the technologies of steam power were to the epoch of British global dominance, and the twin-track developments of electricity and the automobile to the subsequent American Age, digital electronics—and, more specifically, the Internet—are to the "rise of China" and the refashioned world it epitomizes. It is only to be expected, therefore, that the intersection of the post-1979 Open-and-Reformed New China with the post-1990 World Wide Web-enabled Internet should be an object of particular international fascination, and practical concern.

From the dawn of the modern epoch, geopolitical hegemony has been associated ever more intensely with techno-economic leadership, which has in turn been reflected in the international reserve status of a select national currency. An ever more explicitly formalized world monetary order has converted compelling but obscure intuitions of relative national prestige into an unambiguous system of financial relationships, in which a position of supremacy is clearly established, with a definite and singular role.

The suspicions fostered by leadership are no less inevitable than leadership itself. For easily intelligible historical reasons, the French policy establishment has been an especially vociferous critic of international reserve status and its "exorbitant privilege" [1] of seigniorage—the spontaneous 'right' to issue promissory paper in exchange for real goods and services, without any definite prospect of redemption. There can be little doubt that such criticism articulates concerns widely held beyond the Anglophone world, and its substance deserves serious examination.

Of the indispensable building blocks constructing the near future, China and the Internet have special prominence. There are innumerable places where China meets the Web, beginning with the sprawling, multidimensional, and explosively growing Chinese Internet itself. Bitcoin is a recent and still relatively slender thread in the tapestry of global change, but by tugging at it, some central features of the emerging world can be pulled into focus.

Among the characteristics that the Chinese yuan and bitcoin share is that neither is the US dollar. Specifically, both are limited yet practical alternatives to the dollar, at least at the level of microeconomic decision-making. When questions are raised about the durability of the dollar's international role, it can be predicted with confidence that one or both of these challengers will be invoked. For the dollar to die of ice or fire is, today, for it to succumb to geopolitical substitution (by the Chinese yuan) or techno-financial obsolescence (by some decentralized, Internet-based crypto-currency).

The international status of the US dollar concentrates two multi-century trends. Firstly, it represents the ethno-geographical peculiarity of modernity, which—up to the late twentieth century at least—tended to slant global power not only toward the West or Occident, but more specifically toward the Atlantic Anglophone nations, ultimately gathered under American leadership. Since the decline of the Spanish dollar, which monetized the treasure of the New World as the first global currency, international finance has been principally denominated in the currency of an English-speaking nation. Non-coincidentally, it has thus been tightly associated with a set of particular cultural themes, including (Philo-Semitic) Protestant Christianity, the invisible hand, free trade, and liberal democracy. The institutionalization of world finance has been intimately connected with the promotion of a distinct—and for many a distinctly questionable—cultural orientation.

Secondly, the formalization of a global monetary order has been accompanied by an incremental politicization of money, which is to say, by the consolidation of monetary policy as a core function of government. With the establishment of central banking and the demetallization of currency, intrinsic scarcity is replaced by an institutional "promise to pay" that converts money from a tangible asset into a contractual liability. Public confidence in the value of money is turned into a governmental responsibility. It becomes political, and—in the context of a world reserve currency—geopolitical.

In combination, these trends are inevitably provocative, since they concentrate the world's financial destiny in selected, identifiably non-representative hands. Behind the studied neutrality of the Bretton Woods institutions (the IMF and the World Bank) stands the US dollar as the symbol of American exception and the concrete peculiarity of the modern world order.

While it is natural—and even inevitable—for political command of the global reserve currency to be understood as the modern capstone of geopolitical hegemony, it is not a privilege separable from testing responsibilities, or from profound ambiguities. These have been clearly recognized since the 1960s, when Belgian-American economist Robert Triffin formulated the paradox or dilemma that bears his name: that if foreign governments are to accumulate reserves in one selected nation's currency, that nation must necessarily be a net exporter of money—which can be achieved only by running a negative balance of trade. A nation issuing international reserve currency assumes responsibility for global monetary liquidity. This obliges it to consume more than it produces, in order for the difference to be made available as world money. While this requirement is merely seigniorage, seen from the other side, the constraint it imposes upon domestic economic policy options are so strict they amount almost to a destiny.

These constraints are turned into a destructive dilemma by the fact that the mandatory policy structure required to supply the world with liquidity tends to destroy confidence in the currency at the same time, therefore undermining its value. Chronic balance of payments deficits signal currency weakness, since they would normally be interpreted as a sign that a currency is over-valued (or in need of devaluation). For the issuer of a global reserve currency, however, conventional policy responses to this situation are blocked in both directions, since it can neither take measures to close the deficit, nor attempt to strengthen the currency through elevating interest rates. Because for the reserve currency issuer the trade deficit is a constant, rather than a variable, a devaluation merely incites competitive currency destruction worldwide. Strengthening measures, on the other hand, draw in money from abroad (denominated in the international currency) and thus further expand the demand for issuance, which can only be satisfied by a widening of the trade deficit.

In other words, the Triffin Dilemma recognizes that international demand for a reserve currency is inherently paradoxical. What is sought is the currency as it would be were it not supplied through chronic trade imbalances, yet these same imbalances are the only channel through which it can in fact be supplied.

“Chimerica” perfectly exemplifies the essentials of the situation. China’s two trillion US dollars of reserves correspond to a cumulative balance of payments surplus of precisely the same sum, since this is simply what the reserves are. When perceived appreciatively—which was far easier in the final decades of the twentieth century than in the early decades of the twenty-first century—Chimerica has been a complementary economic arrangement through which America achieved high levels of consumption coupled with restrained price inflation, while China realized export-oriented economic development and the break-out modernization that had eluded it for 150 years. To more jaundiced eyes, the same arrangement is a trap that has married American de-industrialization to Chinese environmental devastation, while fueling unsustainable fiscal incontinence in America and a Chinese investment bubble. Whichever picture has greater realism, it can probably be safely concluded that the dissymmetry imposed by an international reserve currency has far-reaching and ambiguous consequences.

Cynically, it might be argued that the tributary aspect of reserve currency status is perfectly matched to deep Chinese traditions in international relations, so that an ascent to yuan-based exorbitant privilege would make a natural geopolitical goal for the Middle Kingdom, as it restored its central position in the world. More realistic however—at least in the near term—is a recognition that loss of domestic economic policy control is an inevitable, and well-understood, consequence of global currency hegemony, and it is one the Chinese government is certain to find unacceptable. Whatever the costs (primarily environmental) associated with the role of “workshop to the world” they are immensely outweighed, from the Chinese perspective, by the advantages. It is on the tributary side of the international reserve currency ledger, where China has been for over four decades, that all crucial vectors of development are to be found—technological absorption, infrastructural deepening, industrialization, urbanization, employment, and even military capability.

If Chimerica is breaking down, it has far less to do with any kind of Chinese challenge—even a spontaneous and unintended one—than with a tragic structure inherent to currency hegemony. As hubris leads to nemesis, so does exorbitant monetary privilege lead to crisis, and even ruin. In both the Spanish and British precedents, financial supremacy became self-defeating, because exporting money (rather than things) differentially advantaged industrial competitors, locking in

secular social decline. There is no compelling reason to believe that America has exempted itself from the same ominous pattern.

On 29 March 2009, in the wake of the financial crisis, Zhou Xiaochuan, governor of the People's Bank of China, delivered an important speech entitled "Reform the International Monetary System." He explicitly referred to the Triffin Dilemma as the key to understanding the world's economic instability, while suggesting that a shift beyond US dollar hegemony would ultimately be required to remedy it. In this respect, his words conformed to a tradition dating back over half a century, to the Bretton Woods negotiations, when John Maynard Keynes recommended the introduction of a neutral global monetary medium—to be called the bancor—making the supply of global liquidity independent of national currencies.

Historically, international reserve currencies have not arisen by design. It might be argued, therefore, that the Keynesian bancor was an unrealistic technocratic fix, blind to the spontaneous momentum that had already made a non-negotiable fact of the dollarized world, even before the Bretton Woods proceedings began. This did not prevent the same basic idea re-emerging in different guises, the most prominent of which has been the IMF's SDRs (Special Drawing Rights), regularly proposed as a neutral international currency in embryo. It was still to SDRs that Zhou turned when searching out a candidate for a neutral world currency.

Perhaps some technocratic solution to the problem of monetary hegemony will ultimately be found, but if so it would mark an unprecedented departure from world financial history. If, as has always been the case to date, economic tides beyond policy control are to determine such outcomes, it is understandable that attention should drift toward the Chinese yuan as an eventual substitute for the US dollar. Yet the lessons of history are available to policymakers, even when the most insistent lesson concerns limitations upon their own influence, and in this case the foremost of these is that the prospect of an international reserve status yuan presents China with a poisoned chalice. It is very unlikely to be accepted willingly.

Might some alternative spontaneous evolution in the nature of money take this critical geopolitical dilemma in a new direction? Such an evolution appears to be occurring, symbolized by bitcoin, history's first example of a decentralized digital crypto-currency. For China, bitcoin—or something comparable to it—could be the only way to evade an assumption of global economic privilege whose essence is ruinous hubris.

Like James Frazer's sacred king, who is crowned in order to be sacrificed, the inner meaning of monetary hegemony is economic and social destruction. China quite clearly understands this, and as the dollar era comes to a close, it is looking for a way out. That is how the China-bitcoin story really begins.

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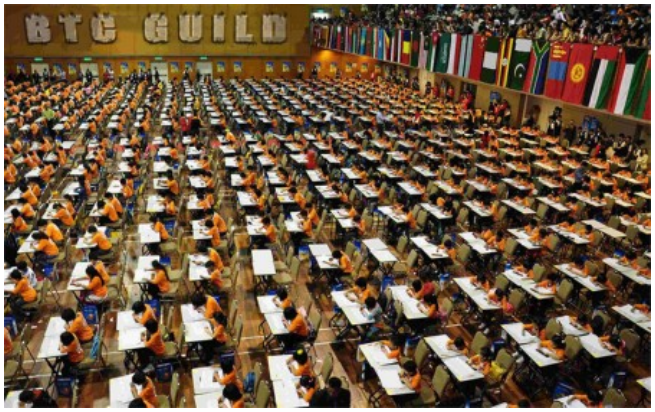
China, Crypto-Currency, and the World Order, Part 2

Digital Denominations

June 2014

By Nick Land



Undercover photograph of BTC Guild, the largest Bitcoin Mining Pool, and one of the oldest remaining Bitcoin pools (credit: Jakub Szypulka CC-BY)

Inside one of the warehouses on Iceland are mining rigs by Cointerra, KnCMiner and recently arrived spondoolies-tech. These rigs stacked high clearly tell that bitcoin mining is now a professional endeavour and students mining entire bitcoins in their dorm are soon to be a thing of the past. Cloudhashing is set to expand its operations. Source: cryptocoinsnews.com. All rights reserved.

Private mining rig. Source: bitcoinexaminer.org. All rights reserved.

I have a lot of friends who are programmers. The programmers have always gone like, “Those [Bitcoin] guys are crazy.”

And then, almost 100 percent of the time, they sit down, read the paper, read the code—it takes them a couple weeks—and they come out the other side. And they’re like: “Oh my god, this is it. This is the big breakthrough. This is the thing we’ve been waiting for. He solved all the problems. Whoever he is should get the Nobel Prize—he’s a genius. This is the thing! This is the distributed trust network that the Internet always needed and never had.”

So, one of the challenges is you take people who *aren’t* professional programmers or mathematicians and then you expect them to understand it from a standing start. And it’s daunting. And so then it gets a word attached to it, like ‘currency’ or whatever you want to call it, and then people think that it is something it isn’t. And you have a sense of this, but it’s a much deeper concept than currency. It’s the idea of *distributed trust*.

—Marc Andreessen (in conversation with Brian Fung)

It was noted in the first part of this essay series that the economic order of the world is being radically reshaped by two roughly coincidental transformations of stupendous consequence: a secular shift of industrial capability from the West toward the East, and an Internet-based revolution in the nature of money. Of these events, the former is already deeply established, and generally recognized, while the latter is still at an initial stage of emergence, and thus far less obvious in its implications. Their intersection remains deeply obscure.

One topic that seems, tantalizingly, to connect these historical threads is the prospective death—or at least radical demotion—of the US dollar. The Triffin Dilemma argues that any currency attaining world reserve status tends, perhaps irresistibly, to destroy itself. [1] America’s relative economic decline looks set to exacerbate the ‘winter’ of this great cycle. From the other side, the dollar is threatened by the piecemeal emergence of an entirely unprecedented non-state currency system, disengaged from all the familiar institutions of monetary management. At the historical horizon of the globalized US dollar, the Chinese yuan and bitcoin are hazily gathered together.

Abstractly anticipated, this twin-threat integrates into a single event of compounded significance, but concrete forecasting can easily become lost in its novel complexities. For roughly half a millennium, transitions in world economic leadership have been smoothed by cultural affinity and intimate strategic collaboration, within a commercial Protestant tradition that has shared a common language, and common enemies, since the late eighteenth century. [2] Nothing comparable is conceivable today, as American global supremacy erodes in a context of intense strategic competition and pronounced civilizational difference.

Relative to the passage from the pound sterling to the US dollar, systematic adoption of the Chinese yuan would require “crossing the great ocean”—an expedition so daunting it is unlikely, in any straightforward sense, to take place. Superficially, digital cryptocurrencies are set at an even more distant remove, alien even to those commonalities that span the gulf between civilizations. Yet they are positively advanced by proximity to the world’s looming monetary precipice, because they represent a solution to the absence of trust.

The word “bitcoin” stands for two very different things (although one contains the other). In its narrow and exact usage it names a specific currency, abbreviated as BTC, incarnating a radically

innovative monetary system whose design was fully specified in Satoshi Nakamoto's 2008 "Bitcoin" paper. [3] The currency became operational in 2009.

The 2008 paper is both a practical invention and a substantial contribution to the philosophy of money. Its central insight is that money functions as a rationing system, acquiring value or application to tradable goods and services through a scarcity *function*. If digital money is to realize this function, it has two interconnected problems to solve. It has to be intrinsically limited, and it has to be exclusively alienable.

Bitcoin solves the first of these problems by emulating a precious metal. It is earned through a process of mining that requires cryptographic work, in order to access bitcoins from a finite 'reserve', released in stages, amounting in total to 21 million BTC. Preserving the finitude of this bitcoin money stock depends on the solution to the second—or 'double-spending'—problem. Considered the principal obstacle to the creation of digital money, the problem of double-spending arises automatically in a medium which effects transfers by copying. Unless money is deducted from the payer as it is credited to the payee, value-conserving expenditures are impossible, yet this simple operation—going against the grain of digital information exchange—seemed to require the introduction of a guarantor, or trusted external party, which the system itself was unable to integrally provide.

This is Bitcoin's most unmistakable breakthrough. Every transaction taking place within the system is entered into a sequential public ledger, or blockchain, which has to be updated as a whole for any exchange to be registered. The cryptographic work of the system's mining activity now acquires a secondary, automatic function, validating each blockchain iteration, and defending the ledger from usurpation by fraudulent agents. The guarantor of each value-preserving 'cash' transfer is thus the entire blockchain itself, operating as a spontaneous or agent-independent trust mechanism. Through this continuously updated, integrated record of all commercial events, the blockchain supports a consistent account of Internet-communicable synthetic scarcity, or self-regulated digital rationing—in other words, the world's first fully-decentralized electronic money system. [4]

In describing this system, one passes very rapidly from the singular to the generic, in a way that is easily understood by analogy, and worth dwelling upon momentarily. Had Netscape been adopted as the name for web browsers in general, certain confusions would almost certainly have arisen. Most significantly, the question "will Netscape survive?" would have been fatally ambiguous. As actual history has demonstrated, Netscape in this counter-factual sense was able both to die, and to thrive beyond all prior expectation. Many hundreds of millions of people use a 'Netscape' every day, although under other (specific and general) names, while only a vanishingly small fraction are aware that Netscape ever existed. It is not clear whether Bitcoin, in its specific sense, could ever be entirely extinguished, but it could certainly be marginalized to the edge of irrelevance: driven from the market by competitive cryptocurrencies through which Bitcoin, in the general sense, advances towards ubiquity.

In its broadest evocation, Bitcoin symbolizes a gathering Internet revolution, of a scale and profundity that is difficult to exaggerate. The technical capability required to run BTC—installed blockchain-supporting software—has a potential extending far beyond the currency itself, and only a very small fraction of this has been explored thus far. This is most dramatically evidenced in the growth of a sprawling spin-off bitcoin ecology of altcoins, or Bitcoin-like P2P contract systems, tagged by the -coin suffix. Prominent altcoins include Darkcoin, Dogecoin, Litecoin, Namecoin, and Truthcoin, with many others on the way. At the outer edge of blockchain abstraction

lie applications such as Ethereum, whose Turing-complete scripting language can support smart contracts, and even autonomous intelligent agents. At this point of sophistication, the ultimate potentialities of the system are not merely undetermined, but undeterminable in principle, and the gateway to a previously unvisited techno-commercial cosmos is opened.

It is this extreme generality that Eli Dourado celebrates in his article "Bitcoin isn't Money—It's the Internet of Money," arguing:
Bitcoin is not just a substitute for money; it can be a form of generalized, programmable, decentralized contracting. […] Most of Bitcoin's critics are making a category error. They are taking aim at Bitcoin the currency, when in fact Bitcoin is much more than a currency, in the same way that the Internet is much more than the telecommunication services that preceded it. […] Bitcoin is a new transport layer for finance that allows decentralized, disruptive, permissionless [ref]Dourado cites Vinton Cerf's 2012 article "Keep the Internet Open," where the notion of "permissionless innovation" plays a crucial conceptual role. development of applications on a separate layer. It has the capability to do for finance what the Internet did for communication.

Among the blockchain-based facilities Dourado envisages are assurance contracts, prediction markets, and continuous micropayments, as well as notary, bonded identity, and reputation rating services. It is easy to see why 'getting' Bitcoin triggers something akin to metaphysical shock. As a self-sufficient digital depository for legal identity, it exhibits—virtually—a potential to absorb the cultural infrastructure of formal transactions without obvious limit. There is perhaps no conceivable 'deal' without blockchain compatibility, and therefore no definite horizon to its commercial, legal, or even political utility.

Of particular relevance here is the blockchain innovation of artificial trust often referred to as trustlessness since it *substitutes for trust*, and is thus pre-adapted to a world in which trust is unavailable. [5] Under the conditions currently impending, a global hegemonic transition occurring beyond international consensus or civilizational continuity, this deep feature of Bitcoin seems certain to be foregrounded. By apparent remarkable coincidence, a collapsing order of promises, or credible global authorities, is accompanied by the emergence of an alternative system of credibility. As the traditional supports of the world's institutional architecture are subjected to accelerating erosion, [6] the premium upon trustless functionality can only increase. Bitcoin suggests itself as a replacement for authoritative guarantors, while opening entirely novel vistas of decentralized institutional creation. The contextual friction, dysfunction, and disagreement of a world in hegemonic disarray only reinforce its attraction.

In comparison to the *smooth* transitions in economic supremacy, from the United Provinces, to the United Kingdom, to the United States, the passage beyond the American world order can only be considered *rough*. It is this roughness that shapes the socket, for which Bitcoin—in its most expansive sense—is the plug. The installation of trustless systems fits into a hole in the world.

How does the rise of trustless Internet technology modify the strategic landscape of the great powers, and the world's other principal actors? To what extent can their responses be anticipated? Only by addressing these questions can some concreteness be introduced to our understanding of the path ahead. They therefore provide the topic for the third (and final) part of this series.

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China, Crypto-Currency, and the World Order, Part 3

Clone Wars

September 2014

By Nick Land

Two years ago, stories of fake tungsten-filled gold coins and bars began to spread. Between the shortage of physical gold and the increase in smuggling, it appears that gold fraud is back on the rise. A mainland China businessman discovered that almost a thousand kilograms of gold bars, worth HK$270 million, that he bought in Ghana have been swapped for the non-precious metal bars. Source: zerohedge.com

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> The German school argued that emphasizing consumption would eventually be self-defeating. It would bias the system away from wealth creation—and ultimately make it impossible to consume as much. To use a homely analogy: One effect of getting regular exercise is being able to eat more food, just as an effect of steadily rising production is being able to consume more. But if people believe that the reason to get exercise is to permit themselves to eat more, rather than for longer term benefits they will behave in a different way. List's argument was that developing productive power was in itself a reward.
>
> […] The German view is more paternalistic [than that of the Anglo-Americans]. People might not automatically choose the best society or the best use of their money. The state, therefore, must be concerned with both the process and the result. Expressing an Asian variant of the German view, the sociologist Ronald Dore has written that the Japanese—"like all good Confucianists"—believe that "you cannot get a decent, moral society, not even an efficient society, simply out of the mechanisms of the market powered by the motivational fuel of self-interest." So, in different words, said Friedrich List.
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> —James Fallows, "How the World Works," *The Atlantic* (December 1993).

The perception of the Chinese Internet among international observers and commentators is dominated by an impression of *control*. [1]The theatrical tradition of Chinese power is an indispensable reference here. China has been exceptional among the great civilizations for the emphasis it has placed upon public perception as the key to administrative authority, with an understanding of rule as essentially *dramatic*. In the narrow context that concerns us here, it is important to note that in the eyes of the Chinese authorities *being seen to control Internet communications* takes precedence over the subordinate and instrumental social and technical capabilities involved. This can be contrasted with Internet security politics in the United States, where invisible data-traffic monitoring receives clear priority. At the center of China's—deliberately conspicuous—system of digital communications oversight stands the Golden Shield project, far more popularly known as "the Great Firewall of China."

No less than the original Great Wall, or even the Imperial Palace, the Great Firewall is a monument. It is first of all a statement, and only secondarily a functional apparatus, with capabilities sufficient to give said statement public credibility. What it overtly means is more important than what it covertly does. The message is long familiar, and recognizably Confucian rather than distinctly communist: signaling social defiance is not a tolerable cultural decision.

This seems to be an improbable environment in which to insert blockchain cryptosystems. Bitcoin unmistakably retains an aura of extreme social defiance. [2] The legacy of the libertarian-oriented hacker counterculture remains clearly legible in its founding documentation and among its first-wave supporters. Among its most ardent proponents, the vitriolic presupposition of government illegitimacy is combined with an approximately unconditional endorsement of anarchistic—or at least agoristic—practices. [3] In this sense, Bitcoin appears as the impending fulfillment of the "Californian Ideology"—a hyper-capitalist assertion of spontaneous order, or radical decentralization, essentially antagonistic to all concentrated authority.

Any balanced estimation of Bitcoin's prospects in China has to begin with a realistic correction of this impression. While insight into Chinese security analysis is never easily attained, it can be confidently assumed that revolutionary agorism does not figure prominently on any official list of Internet threats. Even in America, in comparatively close cultural proximity to the 'cipherpunks' of the West Coast, Bitcoin is undergoing rapid, and far-reaching domestication. [4] In China, where ideological libertarianism is effectively nonexistent, the possibility of technologically catalyzed anarchist politics has to seem vanishingly remote.

The concerns of Chinese officials with regards to the Internet are quite different. They are overwhelmingly oriented to the perceived threat of mass activism, triggered by social media networks, and exemplified by the dynamics of the so-called Color Revolutions in the ex-Soviet republics and subsequently by the Arab Spring. [5] It is the capacity of the Internet to amplify a dissident public 'voice', rather than to facilitate a private 'exit', that determines the security priorities of the Great Firewall. From this perspective, the Bitcoin menace is relatively minor, even trivial, in comparison to Twitter, Facebook, YouTube, and similar channels of vocal dissent.

The administrative challenges Bitcoin does pose to the Chinese authorities are of a technical, rather than existential-ideological, nature, and only tangentially related to the country's monumental apparatus of Internet control. The most politically-charged concern is capital flight or money laundering, but this is a topic of mind-boggling complexity, involving everything from high-level corruption on a titanic scale, through organized crime, to informally tolerated business activities and the attempts of small private actors to secure savings or diversify regime risk. Corruption is clearly perceived by the Chinese Communist Party as an indirect source of political insecurity, and few doubt that the potential of Bitcoin to facilitate the concealment and expatriation of illicit funds was a leading motive for the restrictions imposed so far. [6]

In "How the World Works," James Fallows excavates the neo-mercantilist political-economic theory of Friedrich List from its oblivion within the Anglophone world. He argues that the *laissez-faire* commercial ideal, considered by English-speaking nations as an undisputed norm of rational economic order, has a remarkably limited application beyond these nations. Elsewhere it is treated as a set of impractical, culturally and situationally specific principles, to which only the most nominal deference can safely be paid. The passage of two decades has done nothing to erode the pertinence of this observation.

List's "German System," which was also Alexander Hamilton's "American System"—and indeed the 'system' of every challenger power seeking accelerated industrialization under conditions of strategic disadvantage—was characterized by a series of anomalous features relative to the free-market hegemonic norm that has been identified with Anglophone cultures for over two centuries, and maritime Protestant Atlantic powers for longer still. [7] Yet even these core economic powers, prior to their ascent to industrial dominion, subordinated commercial liberties to nationalistic development imperatives. Both geographically and historically, the 'normality' of the open market is exposed as rare and precarious. As Fallows remarks in "How the World Works":

> Every country that has caught up with others has had to do so by rigging its rules: extracting extra money from its people and steering the money into industrialists' hands. […] Today's Americans and Britons may not like this new system, which makes their economic life more challenging and confusing than it would otherwise be. They are not obliged to try to imitate its structure, which in many ways fits the social circumstances of East Asia better than those of the modern United States or Britain. But the English-speaking world should stop ignoring the existence of this system—and stop pretending that it doesn't work.

Where Chinese Internet policy is concerned, "ignoring the existence of this system" amounts to an interpretative orientation fixated upon domestic security politics and human rights issues, while overlooking its neo-mercantilist features. When this bias is corrected, the "Chinese System" of digital mercantilism can be seen as a classic example of strategically accelerated industrialization, based upon selective protections directed at those business sectors perceived as most essential to the nation's economic future. Quite evidently, the Internet occupies center stage in this strategy, which identifies it as the basic techno-economic platform of the twenty-first-century world. Arguably, the peculiarities of the Chinese Internet make far more sense in the context of geo-strategic industrial competition, than in that of domestic regime insecurity.

The most pronounced features of the "Chinese System" are not restrictions on free political expression—although these can of course be found—but rather the emergence of domestic Chinese business analogs for the major players of the international (i.e., American) Internet economy. The most obvious digital Sino-clones include Baidu (Google), Taobao (eBay, Amazon), Youku (YouTube), Weibo (Twitter), WeChat (Facebook), and Alipay (Paypal). From this perspective, it begins to seem that much less is being *prevented* than *replicated*.

As previously noted in this series, Bitcoin designates both a specific digital cryptocurrency (BTC), and a technical innovation in electronic communications of extreme generality (the blockchain), potentially enveloping all Internet-based activity. Besides its intrinsic significance, the currency can be understood as a test implementation of the blockchain system. Increasingly, as the anticipated techno-economic consequences of the blockchain breakthrough have loomed ever larger, it is the second, expansive sense of Bitcoin that has begun to prevail—even as the currency has entrenched itself among the world's resilient monetary realities.

As the extraordinary implications of blockchain technology have come into focus, [8] historical analogies have escalated. While it may once have made sense to compare Bitcoin to a particular Internet application of great generality, such as the web browser, or perhaps to the World Wide Web, a general-purpose platform built upon the Internet, it is increasingly common to find blockchain technology compared to the Internet as such. On this ever more plausible account the blockchain is of equivalent socioeconomic import to the basic Internet-enabling innovation of packet switching communications—a once-in-a-Kondratieff-wave-level infrastructural revolution. If

this is the case, it is a candidate to be the commanding technology of the first half of the twenty-first century.

How might the “Chinese System” be expected to respond to this emerging reality? Everything we have seen so far points in one direction: *Clone war*. For China to reject the blockchain revolution would be an abdication from all industrial leadership ambitions in the coming digital economy. The only Chinese strategic option compatible with the digital industrialization path so far taken is a Sinification of the technology—a blockchain with Chinese characteristics, in which distributed ledger systems are accommodated to the country’s social and cultural realities. There is no reason to think this will be an easy thing to achieve, but nothing else could possibly work.

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